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# NOTICE OF ALLOWANCE AND FEE(S) DUE

22850 7590 06/15/2009

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.

1940 DUKE STREET ALEXANDRIA, VA 22314 EXAMINER
PEACE, RHONDA S

ART UNIT PAPER NUMBER

2874 DATE MAILED: 06/15/2009

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFERMATION NO.

10/577,045 12/12/2006 Dailchi Suzuki 289688US2PCT 2327

TITLE OF INVENTION: LIOUID CRYSTAL DISPLAY CELL

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	09/15/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further e indicated unless correcte maintenance fee notificat	a below or directed on	or transmitting ng the Patent, a nerwise in Bloc	the ISSU dvance of k 1, by (a	a) specifying a new co	rrespo	ondence address;	and/or	(b) indicating a sepa	rate FEE ADDRES	55 IOF
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10/577,045	12/12/2006			Daiichi Suzuki			289688US2PCT 2327			
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nonprovisional	NO	\$1510	1	\$300		\$0		\$1810	09/15/2009	
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"Fee Address" indi PTO/SB/47; Rev 03-0: Number is required.  3. ASSIGNEE NAME AT	ondence address (or Cha //122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. ess an assignee is ident n in 37 CFR 3.11. Comp	inge of Correspo "Indication for led. Use of a Cu A TO BE PRIN	ndence n istomer		o to 3 nativel ingle f or age attorne be pri type) e pate an ass	registered patently,  irm (having as a ent) and the name eys or agents. If r inted.  ent. If an assigne signment.	membe es of up no name	ra 2 to to 3	ocument has been fil	led for
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4a. The following fee(s) are submitted:    Issue Fee   Publication Fee (No small entity discount permitted)   Advance Order - # of Copies   Publication Fee (No small entity discount permitted)   The Director is hereby authorized to charge the required feet overpayment, to Deposit Account Number					hed.		y orm).			
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NOTE: The Issue Fee and interest as shown by the r	I Publication Fee (if req ecords of the United Sta	uired) will not b ites Patent and T	e accepte rademark	d from anyone other the Office.	an the	applicant; a regi	stered at	ttorney or agent; or th	e assignee or other p	arty in
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10/577,045	12/12/2006	Daiichi Suzuki	289688US2PCT	2327	
22850 7	590 06/15/2009	EXAMINER			
OBLON, SPIVA	K, MCCLELLAND	PEACE, RHONDA S			
1940 DUKE STR		ART UNIT	PAPER NUMBER		
ALEXANDRIA, '	VA 22314	2874			

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 95 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 95 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/577.045 SUZUKI ET AL. Notice of Allowability Examiner Art Unit Rhonda S. Peace 2874 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the RCE filed 4/21/2009. The allowed claim(s) is/are 1,2,6,8 and 10-12. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) X All b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \( \overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /Rhonda S. Peace/ Examiner, Art Unit 2874

Application/Control Number: 10/577,045

Art Unit: 2874

# DETAILED ACTION

# Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/21/2009 has been entered.

# Allowable Subject Matter

Claims 1, 2, 6, 8, and 10-12 are allowed.

The following is an examiner's statement of reasons for allowance:

Addressing claims 1, 2, 6, 8, and 10-12, the prior art fails to disclose or reasonably suggest an optically compensated birefringence mode liquid crystal display cell comprising: an array substrate having a plurality of pixels electrodes and switching components connected to each pixel electrode arranged in a matrix form on a main surface thereof, an opposing substrate having an opposing electrode which has a uniform thickness and is located so as to face the array substrate with a gap between them, color filters comprising red, green and blue filter layers formed corresponding to the pixel electrodes on one of the substrates, and a liquid crystal layer arranged in a bend alignment interposed between the array substrate and the opposing substrate, wherein a minimum value in spectrum of front reflectance of a portion of the opposing electrode corresponding to the blue filter layer is between 380 nm and 480 nm.

Application/Control Number: 10/577,045

Art Unit: 2874

thickness of the opposing electrode corresponding to the blue filter layer is equal to that of the red and green filters, and thickness of the opposing electrode t is confined to  $100 \text{ nm} < t \le 140 \text{ nm}.$ 

The most applicable prior art. Yasuo (JP 08-122803), addressed in the Office Action mailed 12/22/2008, fails to disclose an opposing electrode of uniform thickness, wherein said uniform thickness is greater than 100 nm and less than or equal to 140 nm, in combination with the remaining limitations of the above claim. Instead, Yasuo discloses an electrode that varies in thickness according to the color filter layers, and further teaches against an opposing electrode of uniform thickness and states an opposing electrode of uniform thickness results in a difference in the intensities of each red, green, and blue color in the display, and therefore creates a low quality picture. See Yasuo, ¶ 0002-0005. Another piece of applicable art previously cited in the Office Action mailed 12/22/208, Kikkawa (US 6,665,032), discloses an OCB liquid crystal display having an opposing electrode of uniform thickness. However, Kikkawa does not disclose or reasonably suggest the uniform thickness of the opposing electrode as greater than 100 nm and less than or equal to 140 nm, and also fails to disclose or reasonably suggest a minimum value in spectrum of front reflectance of a portion of the opposing electrode corresponding to the blue filter layer is between 380 nm and 480 nm. Therefore, Kikkawa fails to disclose, suggest, or render obvious the current invention as recited above, either alone or in combination with Yasuo. Accordingly, the current invention as expressed in claims 1, 2, 6, 8, and 10-12 is in condition for allowance

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

# Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda S. Peace whose telephone number is (571)272-8580. The examiner can normally be reached on M-F (8-5).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Uyen-Chau Le can be reached on (571) 272-2397. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rhonda S. Peace/ Examiner, Art Unit 2874 /Uyen-Chau N. Le/ Supervisory Patent Examiner, Art Unit 2874 Application/Control Number: 10/577,045

Page 5

Art Unit: 2874